Appl. No.: 09/400,297

Art Unit: 2175

Amendment dated March 1, 2004

Reply to Office Action of December 1, 2003

Page 2 of 17

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) An image encrypting method, comprising:

a first process of inputting an image by reading an image file expressing the image;

a second process of dividing said image file into portion image data of a predetermined unit;

a third process of generating information incidental to said portion image data, said incidental information including boundary information which expresses a boundary dividing respective said portion image data; and

a fourth process of encrypting every said portion image data to provide every said portion image data with security so that unauthorized access to the portion image data cannot be executed obtained without decrypting using the incidental information,

wherein image-handling of said portion image data is performed on the basis of by using said incidental information and said portion image data remains encrypted during the image-handling.

2. (PREVIOUSLY PRESENTED) The image encrypting method according to claim 1, further comprising: a fifth process of generating an



Appl. No.: 09/400,297

Art Unit: 2175

Amendment dated March 1, 2004

Reply to Office Action of December 1, 2003

Page 3 of 17

encrypted image file from encrypted portion image data generated in said

fourth process and said incidental information generated in said third process.

3. (PREVIOUSLY PRESENTED) The image encrypting method

according to claim 2, wherein said encrypted image file includes a plurality of

marking means, each of said marking means being attached to respective said

encrypted portion image data so as to identify respective boundaries between

said encrypted portion image data in said encrypted image file.

4. (PREVIOUSLY PRESENTED) The image encrypting method

according to claim 1, wherein said incidental information is encrypted, and an

encrypted image file including encrypted portion image data and encrypted

incidental information is generated in said fourth process.

5. (PREVIOUSLY PRESENTED) The image encrypting method

according to claim 4, wherein said incidental information includes each

position information of respective said encrypted portion image data in said

encrypted image file and each size information of respective said encrypted

portion image data.

BI

Appl. No.: 09/400,297

Art Unit: 2175

Amendment dated March 1, 2004

Reply to Office Action of December 1, 2003

Page 4 of 17

6. (CURRENTLY AMENDED) An image encrypting device, comprising:

inputting means which inputs an image by reading an image file expressing the image;

image portion unit dividing means which divides said image file into portion image data of a predetermined unit;

encrypting means which encrypts <u>every</u> said portion image data to <u>prevent provide every said portion image data with security so that unauthorized access to said portion image data <u>cannot be obtained without decryption</u>;</u>

identifier generating means which generates information incidental to said portion image data, said incidental information which expresses a boundary dividing respective said portion image data; and

file generating means which generates an image file on the basis of said portion image data encrypted by said encrypting means and said incidental information generated by said identifier generating means,

wherein image-handling of said portion image data is performed on the basis of by using said incidental information and said portion image data remains encrypted during the image-handling.



Appl. No.: 09/400,297

Art Unit: 2175

Amendment dated March 1, 2004

Reply to Office Action of December 1, 2003

Page 5 of 17

7. (PREVIOUSLY PRESENTED) The image encrypting device according to claim 6, wherein the image file generated by said generating means is an encrypted image file.

- 8. (PREVIOUSLY PRESENTED) The image encrypting device according to claim 7, wherein said encrypted image file includes a plurality of marking means, each of said marking means being attached to respective encrypted portion image data so as to identify respective boundaries between said encrypted portion image data in said encrypted image file.
- 9. (PREVIOUSLY PRESENTED) The image encrypting device according to claim 6, wherein said encrypting means encrypts said incidental information, and said file generating means generates the image file on the basis of said portion image data encrypted by said encrypting means and said incidental information encrypted by said encrypting means.
- 10. (PREVIOUSLY PRESENTED) The image encrypting device according to claim 9, wherein said incidental information includes each position information of respective encrypted portion image data in said

Appl. No.: 09/400,297

Art Unit: 2175

Amendment dated March 1, 2004

Reply to Office Action of December 1, 2003

Page 6 of 17

encrypted image file and each size information of respective encrypted portion

image data.

11. (CURRENTLY AMENDED) A recording medium on which are

recorded image encrypting procedures, comprising:

a first step of inputting an image by reading an image file expressing the

image;

a second step of dividing said image file into portion image data of a

predetermined unit;

a third step of generating information incidental to said portion image

data, said incidental information including boundary information which

expresses a boundary dividing respective said portion image data;

a fourth step of encrypting every said portion image data to provide every

said portion image data with security so that unauthorized access to the

portion image data cannot be executed obtained without decryption using said

incidental information; and

a fifth step of image-handling said portion image data on the basis of by

using said incidental information,

BI

Appl. No.: 09/400,297

Art Unit: 2175

Amendment dated March 1, 2004

Reply to Office Action of December 1, 2003

Page 7 of 17

wherein said portion image data remains encrypted during the image-

<u>handling</u>.

12. (PREVIOUSLY PRESENTED) The recording medium on which are

recorded image encrypting procedures according to claim 11, further

comprising: a sixth step of generating an encrypted image file from encrypted

portion image data generated in said fourth step and said incidental

information generated in said third step.

13. (PREVIOUSLY PRESENTED) The recording medium on which are

recorded image encrypting procedures according to claim 12, wherein said

encrypted image file includes a plurality of marking means, each of said

marking means being attached to respective said encrypted portion image data

so as to identify respective boundaries between said encrypted portion image

data in said encrypted image file.

14. (PREVIOUSLY PRESENTED) The recording medium on which are

recorded image encrypting procedures according to claim 11, wherein said

incidental information is encrypted, and an encrypted image file including

Bl

Appl. No.: 09/400,297

Art Unit: 2175

Amendment dated March 1, 2004 Reply to Office Action of December 1, 2003

Page 8 of 17

encrypted portion image data and encrypted incidental information is

generated in said fourth step.

15. (PREVIOUSLY PRESENTED) The recording medium on which are

recorded image encrypting procedures according to claim 14, wherein said

incidental information includes each position information of respective said

encrypted portion image data in said encrypted image file and each size

information of respective said encrypted portion image data.

16. (CURRENTLY AMENDED) A recording medium on which an

encrypted image file is recorded, said encrypted image file being generated by:

a first process of inputting an image by reading an image file expressing

the image;

a second process of dividing said image file into portion image data of a

predetermined unit;

a third process of generating information incidental to said portion image

data, said incidental information including boundary information which

expresses a boundary dividing respective said portion image data; and

31

Appl. No.: 09/400,297

Art Unit: 2175

Amendment dated March 1, 2004

Reply to Office Action of December 1, 2003

Page 9 of 17

a fourth process of encrypting, per predetermined unit, every said portion

image data which has been divided into said predetermined unit to prevent

provide every said portion image data with security so that unauthorized

access to said portion image data cannot be obtained without decryption,

a fifth process of image-handling said portion image data by using said

incidental information,

wherein said portion image data remains encrypted during the image-

handling.

17. (PREVIOUSLY PRESENTED) The recording medium on which an

encrypted image file is recorded according to claim 16, said encrypted image

file being generated by a fifth process of generating said encrypted image file

from encrypted portion image data generated in said fourth process and said

incidental information generated in said third process.

18. (PREVIOUSLY PRESENTED) The recording medium on which an

encrypted image file is recorded according to claim 17, wherein said encrypted

image file includes a plurality of marking means, each of said marking means

being attached to respective said encrypted portion image data so as to identify

Bl

Appl. No.: 09/400,297

Art Unit: 2175

Amendment dated March 1, 2004

Reply to Office Action of December 1, 2003

Page 10 of 17

respective boundaries between said encrypted portion image data in said

encrypted image file.

19. (PREVIOUSLY PRESENTED) The recording medium on which an

encrypted image file is recorded according to claim 16, wherein said incidental

information is encrypted, and said encrypted image file including encrypted

portion image data and encrypted incidental information is generated in said

fourth process.

20. (PREVIOUSLY PRESENTED) The recording medium on which an

encrypted image file is recorded according to claim 19, wherein said incidental

information includes each position information of respective said encrypted

portion image data in said encrypted image file and each size information of

respective said encrypted portion image data.

BI